



Decarbonising general practice

Durham; Sunderland, South Tyneside

Your guide to a net-zero action plan for non-clinical emissions

Energy

Introduction

To achieve net-zero carbon emissions means decarbonising both clinical and nonclinical carbon. This guide covers non-clinical carbon for general practice.

Warning – do not read from cover to cover!

The guide is designed to be picked up; read the section you want to act on and put in place one key action today. Then find another action tomorrow...

- Over time, the number of actions taken will build.
- Make the actions part of a bigger practice wide strategy they can be ticked off cumulatively.

You are in great company. Other GP practices are:

- becoming carbon literate;
- · having their carbon footprint measured;
- already greening their estates;
- increasingly designing green action plans for their own practice;
- signing up to become active practices or already designing active travel plans.

The Green Impact for Health toolkit – a sustainability accreditation scheme for GP practices – has over 1,000 practices taking part. This means more than 15% of all GP practices are using the toolkit!



We can do this!

Disclaimer

This guide is licenced for use in your practice and by your practice staff only. It may not be amended and republished in any form.

It is not to be shared outside your practice without express permission from NENC ICS.

The information in this guide is considered to be true and correct at the date of publication.

The information contained in this guide includes information derived from various third parties that are neither endorsed nor supported by NENC ICS. NENC ICS takes no responsibility for the accuracy, currency, reliability and correctness of any information included in the Information provided by third parties nor for the accuracy, currency, reliability and correctness of links or references to information sources (including Internet Sites) outside of the guide.

NENC ICS have no liability (including liability by reason of negligence) to the users for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information and whether caused by reason of any error, negligent act, omission or misrepresentation in the Information or otherwise.

Contents







Going net-zero



Let's join the healthcare net-zero movement and decarbonise primary care

Along with the UK government and other businesses and organisations, the NHS in the UK has been proactive in implementing sustainability in healthcare by setting targets and developing the 'Delivering a Net Zero NHS' published in Oct 2020. Wales has a <u>decarbonisation plan</u>, Scotland is process of <u>developing a plan</u>, NI has yet to endorse <u>their targets</u>.

The carbon footprint of the health service is notoriously large – the NHS produces 5.4% of the UK's greenhouse gas emissions. The NHS is also responsible for 3.5% of all road travel in England, producing significant air pollution.

This means all aspects of the NHS are required to take action and this guide is designed to make it easy for you to start taking action on your non-clinical carbon impacts with the target of reducing your impacts by 2045. Although the Greener NHS has a 2045 ambition, the quicker we can reduce our emissions, the greater chance to limit any climate change catastrophe, so aiming for a more ambitious 2025 or 2030 target is ideal!

In each section this guide highlights:

- The quick and easy wins and longer-term changes
- How to take action
- How to monitor and measure your improvements

Dr Matthew Sawyer, GP and founder of SEE Sustainability





The NHS contributes to 5.4% of the UK's carbon emissions.

^{*}The NHS has committed to decarbonising by 2045, however, to prevent the worst impacts of the climate crisis, we should be aiming to decarbonise as rapidly as achievable - by 2025 if possible - and not delay starting to take action.

What could a net-zero practice in 2030 look like?

Imagine your practice with low or no energy bills, fewer asthma patients, healthy staff members who cycle to work daily...

This may sound like a big ask for your organisation, but practices around the country are already taking steps by:

- Reducing their energy use
- · Having travel initiatives for staff and patients alike
- Setting up 'green teams' to encourage and inspire behaviour change
- Working with suppliers to look for low carbon and environmentally responsible options

This guide will support you on your journey to make a net-zero practice by 2030 less of a dream and more of a reality.



125,000 lives

could be saved each year by 2040 by meeting the minimum climate emissions, according to a study by the Lancet*.

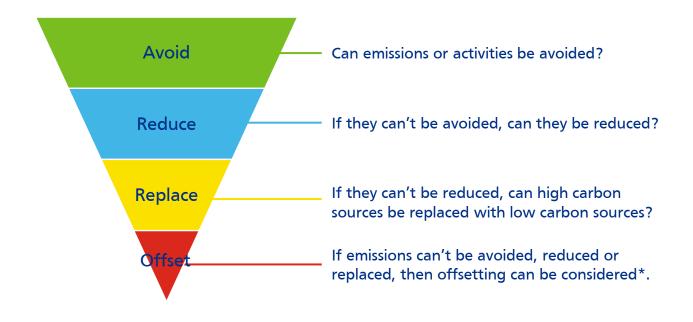
*Source: The public health implications of the Paris Agreement: a modelling study, The Lancet, February 2021, www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30249-7/fulltext#seccestitle10



What does net zero mean?

Along with the UK government and other businesses and organisations, the <u>NHS has</u> committed to be net-zero by 2045 and decarbonise its direct emissions from its operation by 80% by 2028-2032. The NENC ICS 2030 vision to be the greenest region in England

Working to net-zero means measuring and reducing as many emissions as possible with offsetting being the last resort. Using a carbon-reduction hierarchy can help:





GLOSSARY

Carbon footprint

The total amount of greenhouse gas emissions released into the atmosphere that is produced directly or indirectly by human activities. The standard unit of measurement for carbon footprints is carbon dioxide equivalents (CO₂e).

Net-zero

A "net-zero" target refers to reaching net-zero carbon emissions by a selected date where carbon emissions are balanced with those being absorbed.

Zero emissions

Zero emissions are when no carbon is emitted resulting in no net release of carbon dioxide into the atmosphere.

Carbon negative

The reduction of an entity's carbon footprint to less than neutral, so that the entity has a net effect of removing carbon dioxide from the atmosphere rather than adding it.

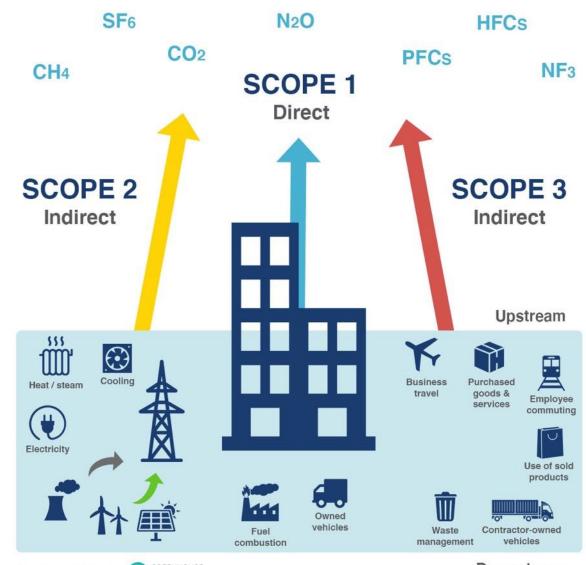
^{*}Offsetting is controversial and should not be relied upon in a carbon reduction strategy.

What are scopes 1, 2 and 3?

Carbon emissions can be grouped into categories depending on where they arise and where they are used by a business.

The <u>Greenhouse Gas Protocol</u> has categorised emissions in the following way:

- Scope 1 direct emissions created by an organisation through fuel combustion and owned vehicles. For primary care, the scope 1 emissions relate to heating and cooling of buildings and any practice owned vehicles.
- Scope 2 indirect emissions from electricity and energy production.
- Scope 3 all the indirect emissions from suppliers, purchases, transport. For a practice, this includes medicines and chemicals (the biggest impact for primary care), medical and office equipment and consumables plus staff and patient travel and all the services we use to run our practices.



Based on guidelines by GREENHOUSE GAS PROTOCOL

Downstream

The biggest carbon impacts from healthcare

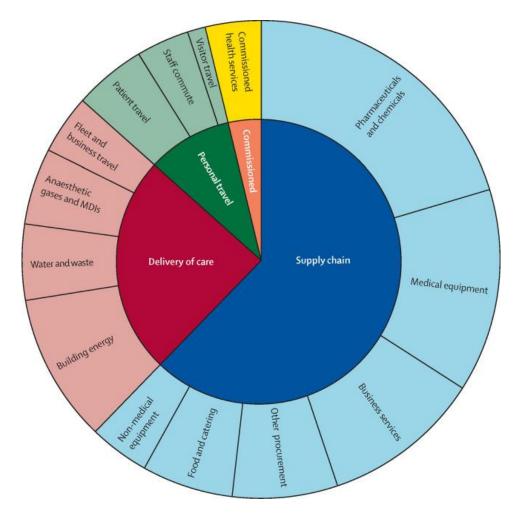
Healthcare has an environmental impact and generates carbon emissions.

In 2020, the Lancet* calculated the whole of the NHS generated 25 megatons of CO_2e , with primary care being responsible for nearly 25% of the emissions.



Globally, the healthcare sector causes a substantial share of the world's emissions of greenhouse gases and air pollutants:

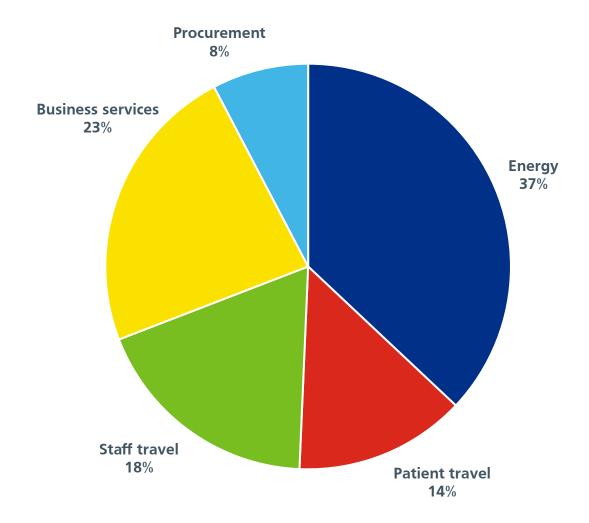
- 4.4% of greenhouse gases
- 2.8% of harmful particulate matter (air particles)
- 3.4% of nitrogen oxides
- 3.6% of sulphur dioxide



Contribution of different sectors to the greenhouse gas emissions of the NHS England, 2019**

^{*}Source: www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30121-2/fulltext

^{**}Source: www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30271-0/fulltext



*

Getting started doesn't necessarily mean tackling the biggest areas. It's a combination of addressing the biggest areas and the easy-wins.

The easy wins also motivate your team and build momentum.

Non-clinical emission hotspots from primary care

In primary care:

- 40% of the emission footprint is due to non-clinical carbon from the running of the practice including energy use, transport of staff and patients, business services and procurement.
- 60% is due to pharmaceuticals and chemicals and gases from inhalers.

The hotspots in primary care for non-clinical carbon emissions depend on the practice list size, location, building type and services provided.

The major emission hotspots will include:

- Energy use for both gas and electricity
- Travel for both patients and staff*
- Business services covering accountancy, IT, waste services etc.
- Procurement covering medical and non-medical equipment and consumables

Other areas – such as water, food and drink and recycling are responsible for smaller proportions of emissions but can be included in your practice plans.

*pre Covid19

5 benefits of climate action for practices

Taking action has lots of additional co-benefits. If you need to develop a business case for your organisation, these are some aspects to focus on:



1. Positive physical and mental health impacts on staff and patients



4. Minimised reputational risk by demonstrating that we recognise the impact healthcare has on the planet



2. Business continuity
and resilience
allowing us to continue to
provide care to our patients



5. Safer and fairer communities by recognising and addressing the health impacts of climate change, which

exacerbate existing inequalities



3. Financial savings
by improving efficiency, reducing
waste and changing service
delivery models

"Healthier populations will prove more resilient to future health threats, thus reducing economic consequences. Finally, whole societies profit when disparities between the most privileged and those most vulnerable to the impacts of climate change and disease are reduced."

The Lancet, February 2021

Getting started with net-zero

To get started...

Audit your impacts by establishing your carbon footprint.

If you have not already done so, the first step is to audit your carbon footprint so you know what the big issues are and you can monitor the improvements from your actions and interventions.

There are plenty of carbon calculators and tools to use, for example <u>SEE Sustainability</u>, <u>Compare Your Footprint</u> or <u>Smart Carbon</u> who offers a simple and cost-effective way for you to measure the carbon footprint of your operations.

You can use external consultants like SEE Sustainability, use a guide to rough calculation can be found <u>here</u>, or head to each section of this guide monitoring and measuring suggestions.

Examples of carbon footprints conducted at a range of services in Salford CCG are available here.



Developing a business case



Making an ethical case for sustainable business practices is easy. For the good of our species and our planet, we all need to come together to reduce our environmental impact, because the ramifications of failing to do so are dire.

Making a financial case for sustainable business practices is easy. There are many financial benefits for a practice in the long term from taking action to reduce our resource or energy use. Energy savings are recurring so worth a huge amount over the years to come.

Sustainable practices are those that:

- 1. at minimum do not harm people or the planet and
- 2. create better outcomes for patients by focusing on improving environmental, social, and governance (ESG) performance of the practice.

Building a business case isn't a one-and-done endeavour, but rather a living and breathing process in which we should position ourselves to be nimble and proactive.

Through regular dialogue with staff and patient, a practice with a sustainability agenda is better positioned to anticipate and react to economic, social, environmental, and regulatory changes as they arise.

Managing risks therefore requires making investment decisions today for longer-term benefits of our patients and staff.

Embedded sustainability efforts clearly result in a positive impact on business performance.

Write a simple narrative to demonstrate how providing more environmentally sustainable healthcare benefits the practice.

Intangible benefits – record but don't quantify – yet! Include reputation, staff morale and motivation, productivity, future proofing.

- 2 Estimate quantifiable savings and benefits. Identify a process to regularly capture these savings.
- Balance against costs of proposed changes.

How to bring your stakeholders on your net-zero journey



1. Get to know what your team cares about and look at where sustainability comes into it. It could be small things like a recycling bin or tea bags to big things like procurement and medication.



 Engage your supply chain – and patients – in setting targets, asking for their input, and creating a sense that 'we are in it together'.



2. Set up a green team or green community with representatives from across the practice.



6. Meet regularly to feedback on progress and troubleshoot challenges.



3. Discuss the findings of your carbon footprint audit with the green team or your whole team.



7. Celebrate and acknowledge incremental improvements throughout the year. Human brains need short-term rewards to keep motivated for long-term goals.



4. Develop your existing green action plan or create a net-zero action plan with targets for each impact area. For inspiration use this guide and the resources within it.

Engaging your team

Green communities rather than green champions

Change comes when people across the organisation are taking action and feel empowered and motivated. It means collaborating with engaged members from each department to identify ways to reduce your footprint and improve your processes. This does not mean everyone has to become environmentalists overnight.

Start with engaged people from a range of departments and as momentum increases and change happens, others will adopt the new social norms.

People are more likely to act if they feel part of the process and they know there is commitment at a senior level. In the 2020 Edelman Trust survey 73% of workers expected CEOs to take action. And likewise, senior leadership are more likely to act if they know it will improve staff retention and commitment to their organisation.



"We're very good at taking a team approach. We have a group of people that really care and are all working on different areas, and that's starting to gather momentum. I think that's been one of the key things."

Karen Creffield, Frome Practice and Primary Network Care Manager A study from <u>Unily</u> on the 'Future of the Sustainable Workplace' report showed that:

- 65% of new staff are more likely to work for a company with a strong environmental record
- 64% would definitely or possibly turn down a job from a company with a bad environmental track record
- 63% want to learn more green skills to become more valuable in the workplace
- 57% of employees said they need more info. on their company's environmental goals
- 46% said they need more training on environmental goals



TRAINING STAFF

Train and educate your organisation so that they can ensure the net-zero strategy is sustained and considered for all future decisions.

Tips to engage your team



• We are the champions

Who are the people in your workplace who are passionate about seeing plastics eliminated? These are the champions. They can help engage work colleagues – the message is far more powerful when it comes from a team-mate.

Give them a support in their role - they could be responsible for making that initial list, regular updates to staff, and generally inspiring others to take the small steps needed.

Start small

All the small actions add up to make a big difference, so make a note of these initial steps you can help staff to get involved in.

Be transparent with your staff about the environmental impact of the products or service they're offered/using, the majority will seek the most sustainable options available (making your decisions even easier!).

Communication is key

The more people involved, the greater the impact. Make sure that staff know what's happening, why it's happening and what you're going to do to make it easy for them to join in.

Take pictures of staff travelling to work, or switching off equipment or recycling before and after, have posters around staff and communal areas with reminders of hints and tips on what they can do.

You do not have to win over all the hearts and minds within your organisation to care about the environment.

You can still engage people with environmental issues without talking about the environment!

Talk about the health benefits of an initiative or the financial savings.

• Emphasise the benefits of a decarbonised practice

Decarbonising can also have financial benefits although there may be some initial investment required. Often savings in one area can be used to fund other areas.

Furthermore, there are a wealth of wellbeing and job satisfaction benefits leading to a happier and healthier workforce.

• Lack of staff engagement?

Why is your team reluctant to participate? E.g., concerns over extra work, disillusion with green initiatives, not sure how they can get involved...

How can you ensure they have the right support, training and capacity?

Ask the staff!

Engaging your patients

While the pandemic was the centre of conversations in 2020-2021, the climate emergency remains a vital issue that more and more people want to act on.

You don't need to turn everyone 'green'. You can communicate the family, community and individual benefits of low-carbon lifestyles to your patients and work with local stakeholders to transform the infrastructure to make those choices easier for people.

Making Every Contact Count have lots of useful resources for patientswww.meccgateway.co.uk/nenc/new

48%

of people are more concerned about the planet's health as a consequence of the pandemic* 80%

are willing to make lifestyle changes to stop climate change as big as those they've made for coronavirus**

What steps can people take?



Eat more plantbased food



Cycle or walk short journeys



Switch to renewable energy



Plant trees

^{*}Kearney study, April 2020

^{**}Futerra Sustainable Lifestyle Survey, May 2020

Energy



Your energy footprint

Energy is used for space and water heating and electrical equipment, lighting etc. Energy often has a high financial and carbon emissions cost for a practice.

Do you want to save money, energy or carbon? You can do all three simultaneously!

£260 = 233 kg
$$CO_2e^*$$
 = 1MWh electricity**

Reductions in use can be achieved through behaviour change and technological advances.

A recent survey of GPs revealed the majority were more interested in reducing their carbon emissions than reducing their expenditure.



Energy use contributes to around 25% of the non-clinical carbon emissions from primary care.

In 2020, primary care emitted 250,000 tonnes of greenhouse gases through energy use.



HOW MUCH DOES OUR PRACTICE SPEND?

An annual electricity bill of £6,000 is equal to emissions of over 5 tonnes of CO_2 e each year.

WHY ADDRESS YOUR ENERGY FOOTPRINT?

- 1. It offers huge financial opportunities up to 25% savings on energy bills in the first 1-2 years.
- 2. Energy often has the highest non-clinical emissions footprint
- 3. It is the easiest way to have a big impact on carbon emissions
- 4. Reporting of energy use and greenhouse gases emissions is mandatory for companies with more than 250 employee. More information is available here.

Energy hierarchy triangle

The Energy Hierarchy triangle is a classification of energy options with the most sustainable at the top.

Following the hierarchy approach helps to reduce the environmental impact of the energy use of the practice.

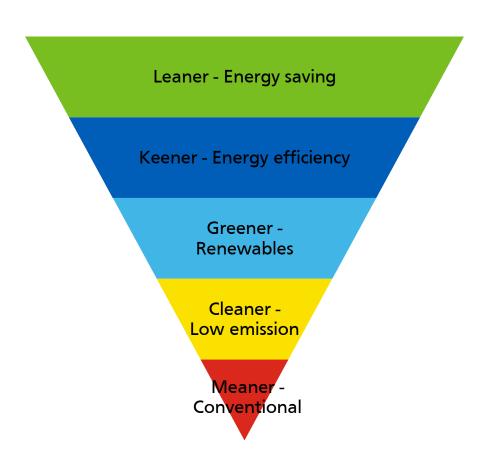
Leaner – The top priority under the Energy Hierarchy is energy conservation or the prevention of unnecessary use of energy. The cheapest unit of energy is the unit of energy you don't use.

Keener – The second priority is to ensure the energy that is used is consumed efficiently.

Greener – Thirdly, BUY Green. The energy that is used is from a renewable energy source. This describes naturally occurring, theoretically inexhaustible sources of energy e.g., 'elemental energy' from the sun, wind, wave, tide or rain (hydropower).

Cleaner – Fourthly, low impact energy production such as nuclear or fossil fuel with carbon capture and storage (not available at scale currently).

Meaner – Finally, energy production using unsustainable sources, such as unabated burning of fossil fuels.



Top actions you can take

- 1. Understand your current energy use better:
- Carry out an energy audit.
- Install a smart meter for better monitoring.
- 2. Make a plan and incorporate the energy hierarchy:
- Making every kWh count: Investing in no-regrets energy saving measures
- Preparing buildings for electricity-led heating:
 Upgrading building fabric
- Switching to non-fossil fuel heating: Investing in innovative new energy sources
- Increasing on-site renewables: Investing in on-site generation



What is your current energy usage?

Knowing the current energy use (gas and electricity) and identifying heavy users or wasted energy can help put plans in place to reduce use and bills.

How to monitor and measure

- Carry out an Energy audit (see box)
- Interrogate your bills for your annual gas and electricity use
- Calculate your practice floor print
- Use your practice floor print to work out energy per m²
- Compare your results to RIBAs 2030 Climate Challenge figures (see <u>RIBA</u> targets for energy use)

Energy	Current annual use (kWh)	Annual expenditure (£)	Practice floor print (m²)	Current benchmark (kWh/m²) OR (£/m²)
Gas				
Electricity				

ENERGY AUDIT

- 1. Record the floor space of the practice
- 2. Use the bills to identify total use/expenditure
- 3. Identify equipment for heating and cooling (air conditioning, room heaters, fridges etc)
- 4. Measure the energy use of the equipment
- 5. Identify air leaks around doors, windows
- 6. Measure loft insulation
- 7. Identify type of windows (double glazed, single glazed)
- 8. Check lighting and other appliances



Plug-in energy monitors can help understand the energy use of diffident pieces of equipment. Measure heating and cooling equipment first.

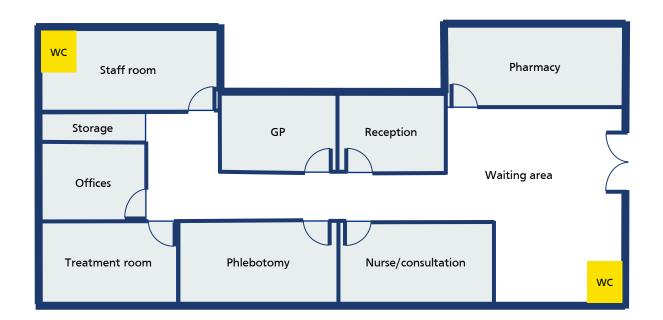
Find monitoring tools <u>here</u>.

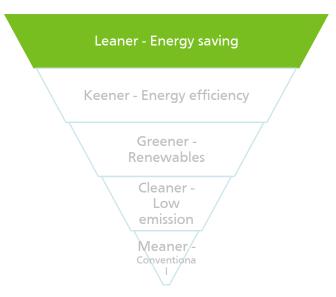
Step 1: Energy saving

Reduce energy use through behaviour change

General Practice Energy Management Floorplan

This energy management floorplan can be used as a guide for ensuring that all rooms/areas have the correct energy saving options available. Sites can apply this as practically as possible, noting different estates types may allow for different solutions.





TREATMENT AND PHLEBOTOMY ROOMS

- Ensure computers and printers/peripherals are switched off every night eliminating standby settings
- Set all PC monitors to go to sleep after 5 or 10 minutes of inactivity a third of a PC's energy is used by the monitor.
- Use thermostats on radiators to control room temperatures

GP AND NURSE CONSULTING ROOMS

- Close doors and window where possible
- Avoid electric heater as they can affect thermostats
- Reducing your PC monitor brightness from 100% to 70% can save up to 20% of the energy the monitor uses.
- Open blinds for natural light

NON-CLINICAL AREAS

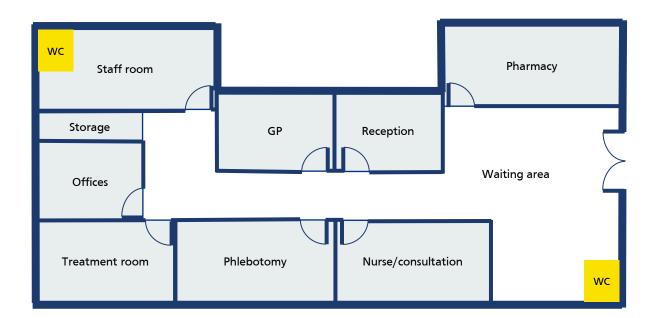
- Consider highest energy efficiency rated appliances within your budget when needing to replace
- Ask staff to only boil as much water is needed in a kettle.
- Use 'on-demand' water heaters instead of kettles

Step 1: Energy saving

Reduce energy use through behaviour change

General Practice Energy Management Floorplan

This energy management floorplan can be used as a guide for ensuring that all rooms/areas have the correct energy saving options available. Sites can apply this as practically as possible, noting different estates types may allow for different solutions.





Equipment left on stand-by can use £10 per year per socket



Case study

One practice asked their clinicians to switch off at the wall as part of their 'Electricity Responsibility Plan'. The depowering of the rooms decreased the practice electricity consumption by 30%

OUTSIDE/ROOF SPACE

- Check and upgrade insulation where needed
- Annual maintenance of boilers and electrical items
- Look to improve thermal efficiency of doors and windows
- Prevent heat loss in the winter Close windows and doors, improve draft exclusion

SHARED SPACE/CORRIDORS

- Turn the thermostat down 1°C saves 8% in heating costs
- Lights on timers e.g., automatically off overnight
- When replacing equipment choose the highest energy efficiency ratings available

LONGER TERM

Plan to replace a boiler with an air source heat pump in your action plan.

Step 2: Energy efficiency

Reduce energy use through by increasing energy efficiency.

E.g., improved fabric efficiency, upgrades to lighting and cooling equipment, controls and metering.

Short-term investments in technology:

- Examine the current insulation is it sufficient? The National Insulation Association can help.
- Is the thermal efficiency of windows enough? Do they feel cold? Are they double glazed?
- Heating are there thermostats to control individual room temperatures? There is evidence that multizone control can drive higher savings.
- Can you use an 'On demand' water heaters instead of kettles for hot water?
- Water softening: Build-up of limescale in a central heating system due to hard water can reduce the efficiency of heating systems. Practices can include measures for water softening.

Electricity use

Lighting

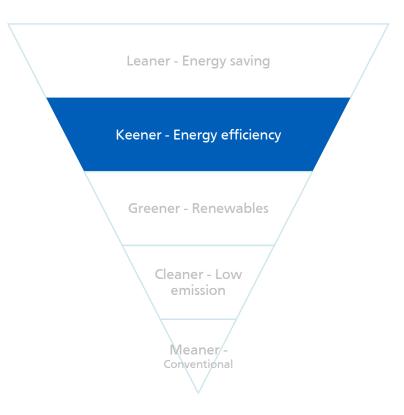
- Movement sensors, occupancy-controlled lighting, automatic light sensors
- Lights on timers e.g., automatically off overnight
- Change to LED bulbs

Computers & printers

 Put computers, printers and chargers on powerbanks can be turned off remotely or on a timer every night. Best buy reviews are here, here and here

Equipment

- When replacing equipment choose the highest energy efficiency ratings available
- Low energy AAA rated electrical equipment e.g., refrigerators





A twin approach to technology change and behaviour change combine to have the greatest impact.

Step 3: Renewables and low emissions

Switch to a green tariff

Only those that are increasing the amount of green energy provision should be invested in. The others are not actually changing the energy-mix on the grid.

To help reduce the amount of carbon used in the UK, you need to look more closely at your choice of tariff. The only truly carbon reducing tariffs are those that buy renewable energy and the REGOs (renewable energy certificates called Renewable Energy Guarantees of Origin) directly from the companies that generate it. Greener is not more expensive, most suppliers now absorb the costs of REGOs.

According to information from Ofgem and research by Which? and the Energy Saving Trust, the greenest tariffs are available from Good Energy, Green Energy UK and Ecotricity.



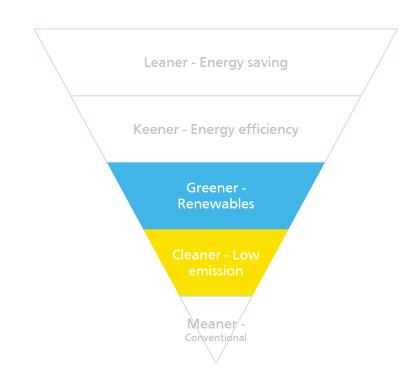
www.ecotricity.co.uk/for-your-business



www.goodenergy.co.uk/business/supply



www.greenenergyuk.com/Business





Switching to a green tariff Is easy – look at Good Energy, Ecotricity or Green Energy UK.

Going further: Self generation and heat management

Self generation

Solar panels can be a cost-effective way of converting the natural power of sunshine into electricity or heat. Solar PV generates electricity on site which can be used by the practice, stored for later use or sold back to the grid. Solar Thermal uses sunlight to heat water and offset heating costs. Many UK solar energy manufacturers, suppliers and installers are members of the <u>Solar Trade Association</u> (STA).

Useful information on selling electricity to the grid is available at:

- www.goodenergy.co.uk/business/generation
- www.ecotricity.co.uk/your-green-energy/solar-power-export

CASE STUDY – URBAN PRACTICE

Panels installed on a practice generated 1.3 MWh in 2020. The practice pay the owner for what it uses and any excess is sold back to the grid.

The practice know where its electricity is generated, and the carbon emissions are zero.



Heat management

Pre-heating: Where the practice is sufficiently well insulated, it is possible to pre-heat ahead of peak times. This enables access to cheaper tariffs which reflect the reduced costs associated with producing power off-peak and reducing requirements for network reinforcement to manage peak loads.

Smarter heating management and use: A 3-6% reduction in heat demand can be achieved through more informed and smarter management of heating the practice.

Smart meters and real time displays have been found to result in energy savings of around 3%, driven by associated actions such as turning the thermostat down or reducing the amount of time the heating is on.

CASE STUDY – URBAN PRACTICE

Unit prices increased in the period studied by approximately 5% and 10%. Despite those increased unit prices, we have been able to reduce the energy bill in real terms by £2,500 ex Vat in the like for like period.

How?

Decrease energy consumption by reducing thermal loss using intelligent building management system. This refines the timings of the heating system to come on based on actual and predicted outside temperatures to reduce overheating the building when isn't being used.

Long-term actions

In 2021, the government consulted on reducing gas use for heating and replacing gas boilers with alternatives from 2025.

Options for future space and water heating includes heat pumps, electric (and infrared) heaters, district heating systems, biomass boilers and possibly hydrogen boilers. The upfront investment tends to be higher, but they can be cheaper to run – especially when combined with electricity storage battery options.

Air source heat pumps are several hundred percent more efficient than gas. There are grant schemes for investing in these. Plan to replace a boiler with a heat or ground source air-pump in your action plan when your gas boiler is in need of replacement. The Heat Pump Association is accessible here.

Practices have different requirements due to size, location etc. It is worth understanding the options prior to the disaster of a boiler breaking down

Some practices may be able to access Salix funding via the <u>Public Sector Decarbonisation Scheme</u>. This is likely to only apply to NHS Trust owned buildings and health centers.



FUNDING

A new government initiative – the Clean Heat Grant scheme – is scheduled to be is available from April 2022.

Current information suggests it will provide some upfront funding, although an up-to-date Energy Performance Certificate (EPC) is likely needed.

Application details and website are currently not available.

Further information available here and here.

NHS Property services

NHS Property services are responsible for 3,000 properties including some GP premises and health centres.

They state "NHS Property Services will align with the ambitions of the wider NHS, aiming to become net zero carbon by 2050".

Their environmental sustainability strategy covers

- Carbon,
- Waste.
- Fuel,
- · Water, and
- · Environmental management.

Their pledges to reduce their carbon emissions are here.

Their webinar on designing and implementing a strategy to achieve the Net Zero goal is <u>here</u>.

Their contact is via www.property.nhs.uk.

OUR PLEDGE

To reduce our carbon emissions

Why is this important?

The Climate Change Act 2008 (2050 Target Amendment) Order 2019 commits the UK government to reduce carbon emissions by at least 100% by 2050, effectively establishing a net zero carbon emissions position by that date.

100% ******** by 2050 ********

The health and care system in England is responsible for approximately 5% of the country's carbon footprint and therefore in January 2020, the NHS launched it's 'For a Greener NHS' campaign to accelerate efforts to tackle climate change with a series of co-ordinated measures to reduce its carbon output.

What have we done in the past 12 months?

We have launched a series of initiatives as we commit to making our sites more environmentally friendly:



In April 2020, we signed two new energy contracts. By moving to 100% renewable electricity, we will offset 37,000 tonnes of CO2 per year without any increase in costs to either the NHS or our tenants. With the implementation of a new procurement strategy, as part of the new contracts, we will be able to deliver some of the best prices in the market, while managing risk and maintaining budget certainty.



We have kicked off a three year programme to proactively install LED lighting in, initially, 40 properties which represents an investment of £1.65m. LED lighting can produce electricity savings up to 75% or more compared to traditional forms, are more adaptable and produce a dearer, crisper light to work under. Over this three year programme we anticipate the cost savings to be in the region of £1.5 - £2m, which is money that can be reinvested in other parts of the NHS, and reducing our carbon footprint by about 2.000 tonnes of CO2.



We are undertaking energy audits at our top 50 energy consuming sites and produce concise reports detailing findings and recommendations. These reports will be used to gather and consolidate

Green New Deal Fund

The Green New Deal Fund (GNDF) is a new low carbon investment fund established by the North Tyne Combined Authority and managed by Amber infrastructure. It will invest £18 million in low carbon infrastructure and can invest directly into small and medium sized businesses by supporting a wide range of low carbon projects across the region, including community energy schemes, Electric Vehicle charging solutions, building retrofits, small scale renewables, natural capital, and low carbon heating systems.

Advantages of GNDF

- Competitive and flexible finance that can be sculpted to meet the Project payback period or can account allow for payment holidays during construction periods
- Grant funding available for innovative measures
- Access to Amber Infrastructure and Bamburgh Capital technical, commercial and legal expertise who can help with due diligence and on commercial structuring

GNDF operates a streamlined and straightforward application process, using a standardised short- form template which the GNDF team can help you complete.

Practices or groups of practices located within Newcastle City, Northumberland and North Tyneside local authorities who are interested in applying to the Green New Deal Fund should visit www.greennewdealfund.co.uk.

Four step approach to decarbonise the NHS estate

Step 1: Make every kWh count

- Carbon and energy management
- LED lighting
- Building Management Systems
- Space heating
- Ventilation
- Building service distribution systems
- Air conditioning and cooling
- Digitalisation
- Small appliances

Step 2: Prepare buildings for electricityled heating

- Improve building fabric
- Check EPC rating
- Doors, windows, insulation

Step 3: Switch to nonfossil fuel heating

- Heat pumps
- Hydrogen boilers
- Hot water

Step 4: Increase onsite renewables

PV installation

Setting targets

Identify ways to reduce your emissions. Once you have calculated your greenhouse gas emissions, this information can help you reduce your emissions and help identify ways to save you money. Setting an emissions reduction target is one way in which this can be achieved.

Setting targets can help you deliver the strategic changes that are needed to reduce use and carbon emissions.

Regarding energy, a practice can set their own targets to achieve their goal such as:

- 50% energy reduction through energy efficiency savings within 3 years,
- Or, have a 100% carbon reduction in space and water heating by installing an air source heat pump by 2025,
- Or, changing to a 100% green energy tariff for electricity supplier by the end of this financial year.

HOW TO SET TARGETS:

- 1. Carry out an energy audit in the practice
- 2. Identify energy-saving opportunities
- 3. Implement energy-saving settings where possible
- 4. Build a business case for energy-efficient replacements and include the payback period.

Route to reduce		Aim/target						
Area	Current footprint (this year)	3 years time		6 years time		9 years time		
		Total % reduction	How	Total % reduction	How	Total % reduction	How	
Energy – electricity	200,000 kWh = 46,000 kg CO ₂ e	25% in use 100% to 'green'	Green team, behaviour change, energy audit Change supplier to 100% renewable	50%	Install on site generation, more efficient equipment	75%	Intelligent building management system for heating	
Gas	35,000 kWh = 6500 kg CO ₂ e	20% in use	Improved insulation, reduced losses	80%	Replace with ASHP/GSHP	100%	Gas free premises	

RIBA targets for energy use

The RIBA has developed voluntary performance targets for operational energy use, water use and embodied carbon.

These performance targets form the basis of the 2030 Climate Challenge. The performance targets align with the future legislative horizon and set out a challenging but achievable trajectory to realise the significant reductions necessary by 2030 in order to have a realistic prospect of achieving net zero carbon for the whole UK building stock by 2050.

You can use your practice figures for total annual energy use (gas and electric) and surgery floor size to understand your current performance. This can help inform practice targets.



RIBA sets energy reduction targets for businesses including a reduction from over 225 kWh/m²/y to less than 55 kEh/m²/y by 2030.

RIBA 2030 Climate Challenge target metrics for non-domestic buildings

RIBA Sustainable Outcome Metrics	Current Benchmarks	2020 Targets	2025 Targets	2030 Targets
Operational Energy kWh/m²/y	225 kWh/m²/y DEC D rated (CIBSE TM46 benchmark)	< 170 kWh/m²/y DEC C rating	< 110 kWh/m²/y DEC B rating	< 0 to 55 kWh/m²/y DEC A rating

^{*}Source: www.architecture.com/-/media/files/Climate-action/RIBA-2030-Climate-Challenge.pdf

Energy options

There are many options which can be considered when looking to reduce heat use or heat losses. This list covers the majority of topics which a practice can consider and research in more detail. The installations costs are a guide only and each practice will need to assess the impact and costs for themselves.

Proposed measure	Description	Potential level of impact	Implementation cost	Running cost*	Ease of installation
Heating, cooling, ventilation (HVAC)					
Heating	Air Source Heat Pump (with 100% renewable electricity supplier)	High	> £1,000	=	Difficult
	Ground Source Heat Pump	High	> £1,000	=	Difficult
	Heating - electric heating (with 100% renewable electricity supplier)	Medium	£100 to £1,000	- = +	Easy
	Connect to existing district heating	High	> £1,000	- =	Difficult
	Heating – thermostatic radiator valves or zone control valves	High	> £100	-	Easy
	Heating - discrete controls	High	> £100	-	Easy
Cooling	Cooling - plant replacement/upgrade	Medium	£100 to £1,000 - > £1,000	- =	Difficult
	Replacement of air conditioning with evaporative cooling	Low	£100 to £1,000	- =	Difficult
Ventilation	Fans – air handling unit	Low	£100 to £1,000	-	Easy
	Fans - high efficiency	Low	> £100	-	Difficult
	Ultrasonic Humidifiers	Low	Less than £100	-	Easy
	Ventilation - distribution	Low	£100 to £1,000 - > £1,000	-	Easy
Buildings and building fabric	Cavity wall insulation	High	> £1,000	-	Difficult
	Double glazing with metal or plastic frames	High	> £1,000	-	Difficult
	Dry wall lining	Medium	> £1,000	-	Difficult
	Loft insulation	High	£100 to £1,000	-	Easy
	Floor Insulation	Medium	£100 to £1,000 - > £1,000	-	Difficult
	Roof insulation	High	£100 to £1,000	-	Easy
	Secondary glazing	Medium	< £100 - £100 to £1,000	-	Easy
	Draught proofing	Medium	< £100	-	Easy
	Automatic/revolving doors	Medium	£100 to £1,000	-	Easy
	Radiator reflective foil (external walls)	Low	< £100	-	Easy
	Pipework insulation both external and internal	Low	< £100	-	Easy
	Building management systems	High	£100 to £1,000 - > £1,000	-	Easy
Lighting and Lighting controls	LED - new fitting	Medium	< £100 - £100 to £1,000	-	Easy
	Lighting - discrete controls or centralised control system	Medium	< £100 - £100 to £1,000	-	Easy
Renewable energy	Solar PV	High	> £1,000	-	Difficult
•	Solar Thermal	High	> £1,000	-	Difficult
Computers & IT solutions	CRT to LED monitors	Low	< £100 - £100 to £1,000	-	Easy
	Energy Efficient Server Replacement	Low	< £100 - £100 to £1,000	-	Difficult
	LED monitors instead of LCD (cost difference)	Low	< £100 - £100 to £1,000	-	Easy
	Network PC power management	Low	< £100 - £100 to £1,000	-	Easy
Hot water	Flow restrictors	Low	< £100	-	Easy
	Hot Water - Efficient taps	Low	< £100 - £100 to £1,000	-	Easy
	Hot Water - Point of use heaters	Medium	< £100 - £100 to £1,000	- =	Easy

^{*}Running cost:

⁺ More than current options

⁼ Cost neutral

⁻ Less than current options

Resources



Useful websites

- Energy Saving Trust
- The Carbon Trust
- <u>Small Business User Guide Measuring and reporting your greenhouse gas emissions</u>
- Business Link
- Envirowise
- WRAP
- Energy Saving Trust Green Fleet programme
- The Quality Assurance Scheme for Carbon Offsetting
- Royal Institute of British Architects (RIBA) Climate Challenge

Energy providers

- Big Clean Switch
- Ecotricity
- Good Energy
- Green Energy

Trade bodies

- Solar Trade Association
- National Insulation Association
- Building Services Research and Information Association (BSRIA)
- Chartered Association of Building Service Engineers
- The Association for Renewable Energy and Clean Technology
- Building Engineering Services Association

Other useful articles

- Sustainable and environmentally friendly general practice
- Energy saving opportunities for GP practices
- Renewable energy good practice guidance
- Making energy work in healthcare Government guidance

Insulation	Air conditionning and cooling	Building Energy Management Systems			
Heatpac Durham heatpac@btconnect.com 0800 55 25 25 https://heatpac.co.uk	Aircare Services Newcastle 0191 261 1144 https://www.aircare-services.co.uk	Energy Surveys North East Jarrow enquiries@energysurveysnortheast.com 0191 428 3335 http://www.energysurveysnortheast.com	Green Zone Surveys National info@greenzonesurveys.com 03444997574 https://www.greenzonesurveys.com		
Minster Newcastle newcastle@minsteronline.co.uk 0191 295 4000 https://www.minsteronline.co.uk/branch- finder/minster-newcastle-branch	Enviro Tech Newcastle enquiries@enviro-techms.co.uk 0191 359 2150 https://enviro-techms.co.uk	Enright Environmental Ltd Blaydon info@enrightenvironmental.co.uk 0191 414 2929 https://enrightenvironmental.co.uk	Fero Consulting National bobcrawford@feroconsulting.uk 07500962548 https://www.feroconsulting.uk		
Green Energy Generation Blyth info@geguk.com 01670 828695 http://www.greenenergygeneration.co.uk	Enright Environmental Ltd Blaydon info@enrightenvironmental.co.uk 0191 414 2929 https://enrightenvironmental.co.uk	Electek Solutions Northeast England info@electeksolutions.co.uk 0191 7317572 https://www.electeksolutions.co.uk	Bryce Energy Services National info@BryceEnergyServices.com 01915806543 https://www.bryceenergyservices.com		
Enright Environmental Ltd Blaydon info@enrightenvironmental.co.uk 0191 414 2929 https://enrightenvironmental.co.uk	Geowarmth North England info@geowarmth.co.uk 0191 257 1704 www.geowarmth.co.uk	Environmental Strategies Ltd National info@esltd.co.uk 01757403113 https://esltd.co.uk	Save Money Cut Carbon National 03331235464 https://www.savemoneycutcarbon.com		
Karnheath Newcastle info@karnheathltd.com 0191 261 5222 https://karnheathltd.com	Sub Zero National 08000051585 https://www.subzeroclimatecontrol.co.uk	Ecomerchant National info@ecomerchant.co.uk 01793 847 444 www.ecomerchant.co.uk	Green Building Store National info@greenbuildingstore.co.uk 01484 461705 www.greenbuildingstore.co.uk		

This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Ventilation	Boiling water taps	Space heating		
Enright Environmental Ltd Blaydon info@enrightenvironmental.co.uk 0191 414 2929 https://enrightenvironmental.co.uk	Fohen National hello@fohen.co.uk 0808 196 2480 https://fohen.co.uk	Oakes Energy Services North England info@oakesenergy.co.uk 01429 837662 http://www.oakesenergy.co.uk	Green and Reliable Heating National alanmarcon@me.com 08001182467 https://greenandreliable.co.uk	
Envirovent National sales@envirovent.com 0345 2727807 https://www.envirovent.com	Zip National 03456005005 https://specify.zipwater.co.uk	Thrift Energy National sales@thriftenergy.co.uk 0191 284 2424 https://thriftenergy.co.uk	Engenera North England info@engenera.com 0330 133 0857 https://www.engenera.com	
	Water Boilers National info@waterboilersdirect.com 08007311491 https://www.waterboilersdirect.com	UK Green Energy National info@ukgreenenergy.co.uk 01302966169 https://ukgreenenergy.co.uk	Engenera North England info@engenera.com 0330 133 0857 https://www.engenera.com	
EPC Rating		Geowarmth	Green Energy Generation	
Energy Surveys Jarrow enquiries@energysurveysnortheast.com 0191 428 3335 http://www.energysurveysnortheast.com	Energess Durham 0191 500 2766 https://www.energess.co.uk	North England info@geowarmth.co.uk 0191 257 1704 www.geowarmth.co.uk	Blyth info@geguk.com 01670 828695 http://www.greenenergygeneration.co.uk Goodlight National sales@goodlight.co.uk 01276691230 https://www.goodlight.co.uk	
Green Energy Generation Blyth info@geguk.com 01670 828695 http://www.greenenergygeneration.co.uk	Green Zone Surveys National info@greenzonesurveys.com 03444997574 https://www.greenzonesurveys.com			

^{*}This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Boilers	Environmental consultancy	Solar thermal and panels			
UK Green Energy National info@ukgreenenergy.co.uk 01302966169 https://ukgreenenergy.co.uk	Capability North East Northeast England office@capabilityne.org.uk 0191 562 3262 https://capabilityne.org.uk	Duncan Renewables Tockwith info@duncanrenewables.co.uk 01423 359 600 http://duncanrenewables.co.uk	Thrift Energy National sales@thriftenergy.co.uk 0191 284 2424 https://thriftenergy.co.uk		
Green and Reliable Heating National alanmarcon@me.com 08001182467 https://greenandreliable.co.uk	You can contact your energy provider to request a smart meter installation.	Geowarmth North England info@geowarmth.co.uk 0191 257 1704 www.geowarmth.co.uk	UK Green Energy National info@ukgreenenergy.co.uk 01302966169 https://ukgreenenergy.co.uk		
Heatpac Durham heatpac@btconnect.com 0800 55 25 25 https://heatpac.co.uk CP12 Energy Northeast England info@cp12energy.co.uk 0191 440 6274 https://www.cp12energy.co.uk	Windows and doors Starlight Windows Newton Aycliffe sales@starlightwindows.co.uk 01325 321301 https://www.starlightwindows.co.uk	Green Energy Generation Blyth info@geguk.com 01670 828695 http://www.greenenergygeneration.co.uk	Engenera North England info@engenera.com 0330 133 0857 https://www.engenera.com		
		Sustainable Energy Engineering Northeast England info@susenergy.co.uk 0191 340 7001 www.susenergy.co.uk	Oakes Energy Services North England info@oakesenergy.co.uk 01429 837662 http://www.oakesenergy.co.uk		
Appollo Gas Services Northeast England info@appollogasservices.co.uk 0191 414 5555 https://www.appollogasservices.co.uk		Northburn Solar Northeast England info@northburnsolar.co.uk 0191 645 1212 http://www.northburnsolar.co.uk	More information on solar panels: Solar Energy UK https://solarenergyuk.org		

^{*}This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Grants / funding	Renewable energy providers	Resources for business	
BREEZ Sunderland breez@sunderland.gov.uk https://www.sunderland.gov.uk/Breez	Green Energy Generation Blyth info@geguk.com 01670 828695 http://www.greenenergygeneration.co. uk	Ecotricity National home@ecotricity.co.uk 03455557100 https://www.ecotricity.co.uk	Business Energy Efficiency Project Durham beep@durham.gov.uk 03000 265547 https://www.beep.uk.net
Best North East Northeast England best@newcastle.gov.uk https://www.best-ne.co.uk	Geowarmth North England info@geowarmth.co.uk 0191 257 1704 www.geowarmth.co.uk	Good Energy National hello@goodenergy.co.uk 08002540004 https://www.goodenergy.co.uk	
	Green Energy National hello@geuk.com 01920486156 https://www.greenenergyuk.com	Northburn Solar Northeast England info@northburnsolar.co.uk 0191 645 1212 http://www.northburnsolar.co.uk	

^{*}This is not an exhaustive list and due diligence must be applied when choosing a supplier.

Net-Zero Action Plan



What is a 'Net-Zero Action Plan'?

A Net-Zero Action Plan can cover as many areas as the practice wishes. However, the major hotspots for non-clinical emissions for primary care to include in their plan are:

- Energy,
- · Travel for patients and staff,
- · Business services including IT and waste,
- Procurement covering medical and office equipment and consumables.

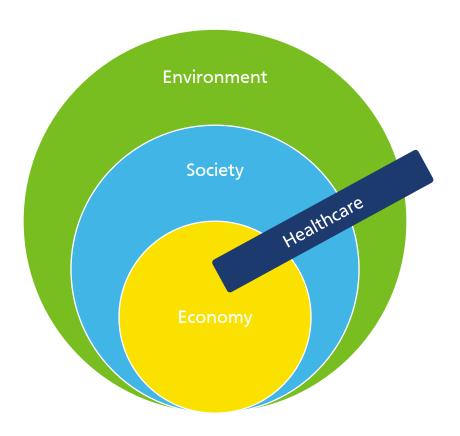
BEFORE YOU START

What is already in place?

Look at the practice and identify good and great behaviour, ideas and systems that already exist.

Who needs to be involved?

Ultimately the aim is to involve all employees but at the start you need to decide who is best placed to lead the development of the practice plan.



Healthcare straddles all the above areas. It is influenced by the environment and impacts upon it; it is part of society, and it impacts on the economy both directly and indirectly.

Monitoring and measuring your impacts

As with all actions on a green action plan, you will need to build in a monitoring and measuring process to calculate how well your actions are leading towards your goals. This can fit with your annual QoF cycle.

Monitoring your actions is vital to make sure you are on the right trajectory and are on target to reach net zero as soon as feasible.

There are audit and other analysis tools available for each section of energy use, staff and patient travel, waste production, procurement and spend on business services.

There are plenty of carbon calculators and tools to use, such as <u>SEE</u>
<u>Sustainability</u>, <u>Compare Your Footprint</u> or <u>Smart Carbon</u> – who offer a simple and cost-effective way for you to measure the carbon footprint of your practice. There is no need for external consultants or additional specialist knowledge.

TARGET SETTING

You can use SMART planning to have Specific, Measurable, Achievable, Realistic and Timely goals so you know the aims to achieve and by when.



IMPLEMENT YOUR PLAN

- 1. Use the audit tools to identify carbon emissions for each aspect of non-clinical emissions
- 2. Set a reduction strategy based on your priorities using SMART planning and
- 3. Complete the expandable guidance plan here.

See Frome Case Study as an example.

Visit SEE Sustainability for a downloadable action plan.

Develop your Net-Zero Action Plan

Area			Aim/target					
	Current footprint % reduction	3 years time		6 years time		9 years time % reduction How		
		% reduction	How	% reduction	How	% reduction	How	
Energy – electricity								
Energy – Gas								
Travel – staff								
Travel – patient								
Business services								
Procurement – Medical								
Procurement – Office								
Total								

Case study: Frome Medical Practice Plan to reduce its footprint

Frome Medical practice have had its carbon footprint calculated and have worked on reducing their emission hotspots. An extract is below.

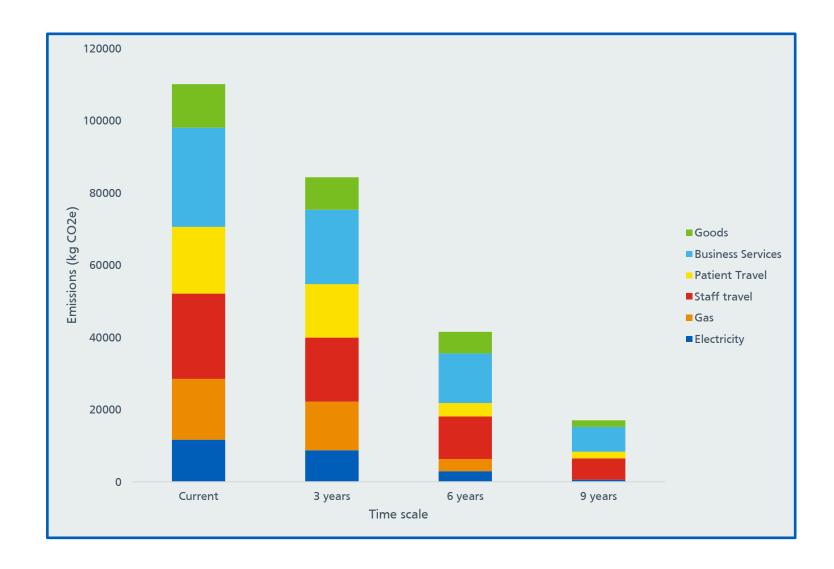
Area	Action
Measure Patient travel Staff travel (via travel survey completed in March) Energy Procurement	To work with SEE sustainability to measure our current carbon footprint, collate all data Spring 2021 and submit for analysis. To evaluate our report in summer 2021 and focus on any additional changes.
Staff travel	To look at plans to reduce carbon from travel to work through exploring alternatives, home working where appropriate. To measure NHS miles and reductions we can make through adoption of virtual meetings. Exploring electric bike and car options.
Patient travel	Promoting active transport. Encouraging less visits to the practice through telephone triage, video calls etc. Focusing on Chronic disease "one stop" clinics.
Procurement	Continued work to improve the knowledge of our supply chains and make improvements which reduce carbon.
Energy	To look at how we make the practice carbon neutral for energy. We currently have 100% renewable energy supplier and solar panels. The next step is look at alternatives with our landlord such as air source heat pumps.
Carbon literacy	To have a carbon literate workforce with 75% having completed training and working towards accreditation in this area so we maximise organisational impact and individual impact.

Example of a low carbon general practice

What could a practice look like in the process of decarbonising their non-clinical emissions?

1		Aim/target					
(kg CO₂e)	Current footprint (kg CO ₂ e)	3 years time		6 years time		9 years time	
		% reduction	How	% reduction	How	% reduction	How
	46,000 kg CO ₂ e	25% in use 100% green	Green team, behaviour change, energy audit. Change to 100% renewable.	50%	Install on site generation, more efficient equipment.	75%	Intelligent building management system for heating.
Energy – Gas	37,000 kg CO ₂ e	20% in use	Improved insulation, reduced losses.	80%	Replace with ASHP/GSHP.	100%	Gas free premises.
Travel – staff	46,000 kg CO ₂ e	25%	Incentivise those closest to walk or cycle.	50%	Actively encourage bike to work scheme, e-bikes, install facilities.	75%	Install EV charge point at surgery, encourage those who travel most to EV.
Travel – patient	24,000 kg CO ₂ e	20% in use	Promote walking scheme, actively push active travel.	80%	Look at practice boundary, install EV charge point for patients.	90%	Arrange with local bus service re requirements.
Business services	30,000 kg CO ₂ e	20% in service use 25% fall in carbon	Identify services which are no longer needed. Use lower carbon services in the biggest hotspots.	50% reduction in carbon	Actively identify further low carbon services; using only services with a decarbonisation plan in place.	At least 75% reduction in carbon	Use only carbon neutral suppliers for all new suppliers. Audit and press current suppliers to achieve carbon neutrality.
Medical procurement	24,000 kg CO ₂ e	25%	Audit and identify medical equipment and consumables. Manage stock better.	50%	Identify alternative clinical pathways to reduce single use.	75%	Identify reusable medical equipment; remove single use; 100% at end of life to refurb service.
Office procurement	20,000 kg CO ₂ e	20% in use	Paper free with digital as default for communication.	50%	Use recycled equipment as default via Warp-it etc.	100%	Remove all single use materials; only use suppliers with net zero policy.
Total	227,000 kg CO ₂ e						40,900 kg CO ₂ e - 82% reduction

Carbon reduction analysis



Implementing actions now leads to benefits both now and in the future.

Reducing non clinical carbon emissions as per the previous plan and using average practice emission data, a reduction at each 3 year review point is shown.

Over 9 years, a reduction of 80-90% is achievable while maintaining high quality patient care.

How to use your influence

Anna Lappe is quoted as saying "Every time you spend money, you're casting a vote for the kind of world you want". We can use our practice purchasing power for our energy, business services and procurement.

In addition to the power of our choices, we also have the power of our voices, and this is another one that we underestimate.

- Use your voice ask your suppliers for better, demand change.
- Seek our suppliers who have measured their footprint and who have put in place positive changes
- Tweet brands and retailers to let them know if you're not happy with something (and indeed if you're really happy with something!).

We already influence our patients through our work, but we can use our trusted voices to help reduce carbon emissions for our practice, our staff, our patients and their families and the wider community we work in.

Tell others if you declare a climate emergency as a practice. Help to declare is here.

Climate change is 'odd' as a challenge as we are all the villains but also all are potentially the heroes.

It's why it can be such a hard sell as it requires everyone to look inward as well as outward.



Summary

What can I do first?

- 1. Measure your emissions
- 2. Set a decarbonisation target to zero
- 3. Make an action plan and take action

What could I prioritise?

- 1. Reduce energy use and decarbonise what is used
- 2. Make active travel default choice for staff and patients and decarbonise the rest
- 3. Reduce all procurement and use low carbon options for what is used

Declaring a climate emergency





Climate emergency declaration

A guide for primary care

The climate crisis is a health crisis

As a GP, my training has equipped me with the skills needed to diagnose illnesses and prevent ill health. We see the young and the old, care for the dying and help people make lifestyle changes. Our wider role is to promote wellbeing, reduce inequalities and support patients to thrive within their communities.

I therefore understand that to do this successfully, we must fight for our piece of limited - usually financial - resources, and when we get them, we cannot afford to be profligate with them.

The planet also has finite resources, and we cannot afford to be wasteful with these either.

I believe we should arrange healthcare as if each of us were going to live on this planet forever.

An important step to taking climate action is to declare a climate emergency. What does this mean?

- 1. Telling the truth acknowledging this is an emergency.
- Acting now taking radical steps in our personal and professional lives to halt biodiversity loss and reduce greenhouse gas emissions to zero by 2040*.
- 3. Stronger together working with others to create new solutions.

Dr Matthew Sawyer, GP and founder of SEE Sustainability



^{*}The NHS has committed to decarbonising by 2040, however, to prevent the worst impacts of the climate crisis, we should be aiming to decarbonise as rapidly as achievable - by 2025 if possible - and not delay starting to take action.



Who in healthcare is declaring a climate emergency?

It has been a momentous few years for climate change. We've seen an increasing number of practices and healthcare trusts, councils, organisations as well as the NHS and the UK Government take action and declare a climate emergency.

In 2020, the NHS became the first healthcare organisation in the world to commit to achieve net zero carbon emissions.

Cornwall Health Care Partnership led the way with a commitment to achieve net-zero carbon emissions by 2040:

"In declaring a 'Climate Change' emergency, the NHS recognises the threat faced to public health as a result of global warming and seizes some of the opportunities to lead and work a more sustainable life that has been presented during the pandemic."

Cornwall and Isle of Scilly Health Care Partnerships; NHS Kernow Clinical Commissioning Group, the Royal Cornwall Hospitals NHS Trust (RCHT) and Cornwall Partnership Foundation NHS Trust (CFT)

Healthcare is beginning to take climate action. All of us must recognise our role and potential impact and contributions on a personal and professional level. These impacts can often be bigger than we think.

"We enjoyed a close working relationship with our local community and town council, and we were inspired when they were one of the first in the country to declare a climate emergency in 2018.

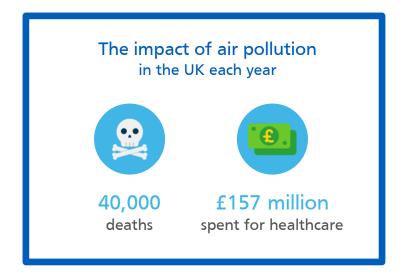
In March 2020, we were delighted to be joined by Portishead Medical Group, Hankham Health, Aberfeldy Practice and Kintbury and Woolton Hill Surgeries to declare an emergency."

> Karen Creffield, Frome Practice and Primary Network Care Manager

Why is primary care declaring a climate emergency?

In primary care our staff teams, communities and patients have been significantly impacted by the Covid-19 pandemic, but the next crisis is just around the corner. In fact, you are already experiencing the impacts of climate breakdown.

Climate breakdown is a health crisis, and primary care is on the frontline as its impacts are already affecting our communities from flooding, heatwaves and air pollution.



"As a doctor, I feel a duty to act on climate change. As well as opportunities for carbon and cost saving measures, overall this is about good clinical care; improving asthma care, access to green spaces and reducing health inequalities.

This is beneficial for patients and should not be seen as asking people to do more."

Dr Tamsin Ellis, General Practitioner in London

"Air pollution causes the condition of people with asthma and breathing difficulties to get worse and particularly affects poorer communities. It is also an attributable risk factor for cardiac problems and lung cancer.

As doctors, we have a role to prevent these things from happening. Fortunately, the benefits of taking action to prevent climate change also lead to better health."

Dr Murugesan Raja, GP, respiratory specialist and member of Manchester's Climate Change Board



98,000 lives saved through flexitarian diets 100,100 lives saved if the UK focused on health gains

21,500 lives saved through active travel 38,400 lives saved if the UK focused on health gains





3,500 lives saved through improved air quality

5,800 lives saved if the UK focused on health gains

The benefits of climate action for health

Reducing our carbon emissions isn't only good for the health of our planet and of wildlife; it will significantly benefit our health.

A piece of research* published in The Lancet in February 2021 demonstrates the potential health benefits of climate action. It found that if the UK achieved its 2040 climate targets, each year we could save 98,000 lives through better "flexitarian" diets, 21,500 lives by people taking more exercise and 3,500 lives from reductions in air pollution.

By going further and focusing on the health gains from addressing the climate crisis, every year 100,100 lives could be saved through dietary changes (with 50% adopting flexitarian diets and 50% going vegan) and 38,400 lives from more active travel, with 75% of people walking or cycling over the course of a week). Cutting air pollution could save 5,800 lives a year.

5 benefits of climate action for practices

Taking action has lots of additional co-benefits. If you need to develop a business case for your organisation, these are some aspects to focus on:



1. Positive physical and mental health impacts on staff and patients



4. Minimised reputational risk by demonstrating that we recognise the impact healthcare has on the planet



2. Business continuity
and resilience
allowing us to continue to
provide care to our patients



5. Safer and fairer communities by recognising and addressing the health impacts of climate change, which

exacerbate existing inequalities



3. Financial savings
by improving efficiency, reducing
waste and changing service
delivery models

"Healthier populations will prove more resilient to future health threats, thus reducing economic consequences. Finally, whole societies profit when disparities between the most privileged and those most vulnerable to the impacts of climate change and disease are reduced."

The Lancet, February 2021

Why make a declaration if you are already addressing your carbon footprint?

As a respected body in your community, you have agency and the ability to engage and inspire strong action from other businesses and organisations. Primary Care trusts have partnered with local councils and others on their declaration and for collective action.

You also have the power to connect the dots between the impacts of climate change on human health, engaging a wider audience who may not feel climate change is affecting them or their families.

Imagine your community more resilient to floods and extreme weather conditions, meaning less mental health issues. Imagine reduced air pollution from community car-free zones and walking initiatives, leading to less asthma and respiratory problems.





Greater Manchester was the first "integrated care system" – NHS bodies and council social care working together to declare a climate emergency.

They have a bold ambition for the city region to be one of the globe's healthiest, cleanest and greenest city-regions and to be carbon-neutral by 2038.

What to include in your green action plan

If you already have a green action plan in place, this needs revisiting to ensure it reflects the urgency of the climate emergency and these commitments:

- Working towards decarbonise and achieve net-zero by 2040 or sooner if possible.
- Addressing the carbon footprint of all impact areas of the organisation including:
 - o Prescriptions
 - Travel (staff and patients)
 - Energy usage
 - o Services used
 - o Purchases
 - Waste reduction

For more guidance on net-zero and carbon reduction, you can find resources here.



The NHS contributes to 5.4%* of the UK's carbon emissions.

In 2020, it emitted 25 million tonnes of greenhouse gases - emissions equivalent to that of a small country*



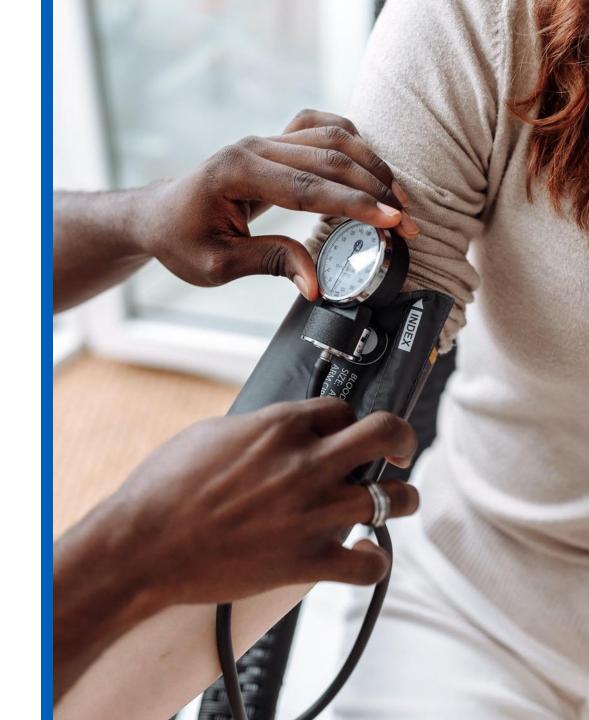
Monitoring and measuring your impacts

As with all actions on a green action plan, you will need to build in a monitoring and measuring process to calculate how well your actions are leading towards your goals. This can fit with your annual QoF cycle.

Monitoring your actions is vital to make sure you are on the right trajectory and are on target to reach Net Zero as soon as feasible.

You can use SMART planning to have Specific, Measurable, Achievable, Realistic and Timely goals so you know the aims to achieve and by when.

There are plenty of carbon calculators and tools to use, such as <u>SEE</u> <u>Sustainability</u>, <u>Compare Your Footprint</u> or <u>Smart Carbon</u> – who offer a simple and cost-effective way for you to measure the carbon footprint of your practice. There is no need for external consultants or additional specialist knowledge.



All you need to declare a climate emergency

Regardless of where they are at on their Green NHS journey, any practice or GP can start the process to declare an emergency now. These are the first steps.

1. Know the facts

- Read the latest medical papers on 'Climate crisis is a health crisis'.
- Visit the links in the Resources section.
- Get carbon literate by taking our Health Carbon Literacy course.

2. Build a green team

Bring together people from different departments to implement change. You may feel concerned that not everyone is environmentally motivated, but sustainability is about people, planet and profit, so people should care about one of these!

3. Develop a green action plan

Creating a plan may seem overwhelming, but you don't have to find the solutions at once. To get started, identify your priority areas and the easy wins. We have templates and guidance to support you <u>here</u>.

4. Set carbon reduction targets

Targets are important because they will give you a clear direction, they'll motivate your teams and will allow you to measure progress. Read the NHS' targets <u>here</u>.

5. Monitor and measure

This will allow you to identify if you have made improvements, gather baseline data and annually check for reductions.

6. Involve senior staff

Senior staff, partners and practice managers are instrumental to success as they are often aware of the anticipated health impacts of the climate crisis on staff, patients and the successful delivery of healthcare. Involvement from the early stages can help set the aims and goals for the whole team while inspiring and enthusing everyone to take part.



"For the emissions we control directly (the NHS Carbon Footprint), we will reach net zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032."

NHS England, Delivering a net zero NHS

Engaging your team

Declaring a climate emergency and acting on climate change means collaborating with engaged members from each department to identify ways to reduce your footprint and improve your processes.

You do not have to win over all the hearts and minds within your organisation to care about the environment. Many of the steps you will take have other benefits, which you can talk about:

- Financial savings
- Improved patient wellbeing
- PR and community engagement opportunities

Get to know what your team cares about and look at where sustainability comes into it. It could be small things like a recycling bin or tea bags to big things like procurement and medication. Convening regular meetings with your 'green team' to work on key areas and support each other will keep the momentum going.



"We're very good at taking a team approach. We have a group of people that really care and are all working on different areas, and that's starting to gather momentum. I think that's been one of the key things."

Karen Creffield, Frome Practice and Primary Network Care Manager



Engaging your patients

While the pandemic was the centre of conversations in 2020-2021, the climate emergency remains a vital issue that more and more people want to act on.

You don't need to turn everyone 'green'. You can communicate the family, community and individual benefits of low-carbon lifestyles to your patients and work with local stakeholders to transform the infrastructure to make those choices easier for people.

48%

of people are more concerned about the planet's health as a consequence of the pandemic* 80%

are willing to make lifestyle changes to stop climate change as big as those they've made for coronavirus**

What steps can people take?



Eat more plantbased food



Switch to renewable energy



Cycle or walk short journeys



Plant trees

^{*}Kearney study, April 2020

^{**}Futera Sustainable Lifestyle Survey, May 2020

How to write your climate emergency declaration

It should include two main messages:

- Your acknowledgement of the climate crisis and of the role your sector can play in providing solutions;
- Your pledge to take action.

To make it easy for you to get started, there are already approved templates, you can find one <u>here</u>.



EXAMPLE DECLARATION

- 1. We recognise that the climate and ecological emergency is a health emergency.
- 2. We recognise that the health impacts of climate change are unfairly distributed and exacerbate existing health inequalities.
- 3. We will act in both a professional and personal capacity to reduce the severe risks to public and global health.
- 4. We will communicate the importance of these threats to health to our colleagues, decision-makers and the public.
- 5. We will call on our organisations and government to tell the truth, respond fairly, and act in keeping with the urgency of the threat.

Further examples can be found on the <u>Health Declares</u> website.

Sharing or publicising your climate emergency



Doctors have a duty to benefit the health of the wider community. Raising awareness about climate change and sharing your own manageable, positive actions is a great way to encourage change.

To maximise impact with your climate emergency declaration, you can share it with:

- Local journalists
- All your suppliers and stakeholders
- On all your social media channels
- · Other local health organisations

Here are some tips for powerful communications:

- Aim to personalise the story for your local community, highlighting how you are already seeing the impacts of climate change on your patient's health in your region, which is motivating you to take action.
- Call on other local institutions and health organisations to declare, sharing your learnings and resources.
- Spread the word to influence national health organisations such as Royal Colleges, trade unions or defence organisations.
- Join local groups to support change.



The NHS contributes to 5.4% of the UK's carbon emissions.*

Further support

You are not alone in your journey! There are many others taking these steps and a lot of guidance is available on these issues.

- SEE Sustainability, Resources for primary healthcare: <u>seesustainability.co.uk/blog/f/useful-sustainability-resources-for-primary-healthcare</u>
- Carbon Literacy Project: carbonliteracy.com
- Centre for Sustainable Healthcare: <u>sustainablehealthcare.org.uk/courses</u>
- · Doctors for Extinction Rebellion: doctorsforxr.com
- Green action plans: <u>sap.sustainablehealthcare.org.uk</u>
- Greener NHS: www.england.nhs.uk/greenernhs/
- Greener Practice: greenerpractice.co.uk
- Health Care Without Harm, Global road map for health care decarbonization: healthcareclimateaction.org/roadmap
- Health Declares: healthdeclares.org/
- The Lancet, The public health implications of the Paris Agreement: a modelling study: thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30249-7/fulltext
- UK Health Alliance on Climate Change, Carbon Literacy guide: <u>ukhealthalliance.org/carbon-literacy-guide</u>
- Green Impact for Health: www.greenimpact.org.uk/GlforHealth
- Clean Air Framework www.globalactionplan.org.uk/business-clean-air-taskforce/business-for-clean-air

















Who are SEE Sustainability?



"My vision: for all GP practices to become carbon literate, have a green action plan in place and declare a climate emergency." I'm Dr Matt Sawyer, a GP in the Northeast of England and the founder of SEE Sustainability, an environmental consultancy focusing on the decarbonisation of small and medium sized businesses with specific expertise in the health service and primary care.

I split my time between general practice and sustainability consultancy, working with primary care trusts and surgeries to develop their 'net zero plans' and help identify financial savings along the way.

I also deliver regular climate literacy training and have a host of on-demand training courses online.

Contact



info@seesustainability.co.uk



@SEESustainabil1



seesustainability.co.uk



Dr Matthew Sawyer MB, MSc, BSc, GradIEMA







Co-designed with Julie Jamis